

TOTAL CYANIDE DISTILLATION**SM 4500-CN-C-1999 (2011)**

ADDITIONAL QC REQUIREMENTS FOR THIS METHOD: Certified or Accredited laboratories using this method are assessed to applicable requirements of SM 1020 and SM 4020.

Facility Name: _____ VELAP ID _____

Assessor Name: _____ Analyst Name: _____ Inspection Date _____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst: _____					
Sample ID: _____ Date of Sample Preparation: _____ Date of Analysis: _____					
1) Were samples Cooled, $\leq 6^{\circ}\text{C}$, NaOH to pH >10, and reducing agent added if oxidizer present (such as sodium thiosulfate if residual chlorine is present or H_2O_2 if sulfur compounds are present)?	40CFR136.3 Table 1I				
2) Were samples analyzed within 14 days?	40CFR136.3 Table 1I				
3) Was a 500 mL sample aliquot (or diluted sample if > 10 mg CN/L) added to a 1 liter boiling flask?	4.a				
4) Was 10mL of 1N NaOH solution added to the gas scrubber?	4.a				
5) When S^{2-} generation from the distilling flask was anticipated, was powdered PbCO_3 added to the absorber solution?	4.a				
6) Was suction set so that approximately 1 or 2 air bubbles per second entered the boiling flask and maintained throughout the reaction?	4.a				
7) Was sulfamic acid added through the air inlet tube and washed down with DI water?	4.b				
8) Was 50mL 1+1 sulfuric acid added through the air inlet tube, rinsed with DI water, and air then allowed to mix boiling flask contents for 3 minutes? (And optionally, 20 mL of MgCl_2 is added)	4.c				
9) Was mixture in boiling flask heated with rapid boiling and refluxed for at least 1 hour (rate of 40 to 50 drops/min from condenser)?	4.d				
10) Was heating discontinued after refluxing but air flow continued for 15 minutes prior to absorption solution removal?	4.d				

Notes/Comments: